

REMARKS

Applicants' would like to thank Examiner Gregory Bernarr for his help throughout the tortured prosecution of this case and in understanding the current rejections. As we understand it, the objections and rejections set forth herein are a result of a review by reissue officials. We welcome the opportunity, if possible, to interact directly with them to advance the case.

At the outset, we note that the Office has made several objections and rejections based on formalities found in documents that were originally accepted over a decade ago. We find this incredulous given the long tortured history of this case, which was originally allowed nearly six years ago. Applicant is now met with further delay in addressing formal objections and rejections based on decade old documents, which do not affect the prosecution on the merits, as well as a new art based rejection. Nevertheless, Applicants in the interest of issuing the case respond to each of the Office's objections and rejections in turn.

1. The March 10, 2010 Office action notes without a formal rejection or objection that:

The amendment of October 20, 2008 is non-compliant with 37 C.F.R. 1.173 for being in improper format. In addition, the amendment of October 20, 2008 does not comply with 37 C.F.R. 1.173(c) in that it does not clearly show the support for the new claims in the disclosure.

At the outset, we note the Office has not provided any reason or guidance as to what is improper about the format. This, however, should be a moot point, since the October 20, 2008 response was not an amendment, but rather a reply to the Office's request to provide a clean copy of the claims. As stated in the October 20, 2008 response, no amendments were made. No new claims were added, therefore, there is no requirement to show support for the claims. It was, and is, applicant's understanding that the October 20, 2008 response was merely to help the Office, and particularly the printer, in identifying the allowed claims, given the long and arduous prosecution, and, as we subsequently learned, in light of the lost file at the USPTO. Accordingly, Applicants respectfully assert that the October 20, 2008 reply was responsive and should have been helpful to the Office, and that the Office has not lodged any objection or rejection based thereon.

Nothing here should prevent the application from passing to issue.

2. The Office objects to the “original declaration of November 8, 1999” because it lacks a proper mailing address. The original declaration apparently fails to include the city and state in the inventor’s address. Applicant finds an objection on this ground to be ill timed, more than a decade after the fact and in light of the continued communications between the Office and Applicant’s attorneys. Nevertheless, Applicant submits herewith an Application Data Sheet setting forth the correct information in lieu of a new Declaration.

3. The Office again, for the first time objects to a document that is a decade old in indicating that the original reissue oath/declaration of June 20, 2000 is defective. This is particularly more repugnant since the Office previously objected to the reissue Declaration forcing Applicants to file another, which the Office accepted, but now ten years later lists its objection. The Office clearly understood, and still understands, what the Applicant meant. The Office is suggesting that a new reissue declaration be filed simply changing the phrase “overlimits the scope of the claim” to “the means language causes the claim to be narrower than is necessary for patentability.” The use of the phrase “overlimits the scope” while perhaps not as clear, or more to the point not as common, as the Office’s suggested language, is not unclear. The limitations discussed (the means limitations) overlimit, that is they unduly narrow, the scope of the claim.

In an effort to speed things along, Applicants provide herewith a freshly executed reissue declaration with the Office’s suggested language.

4. Claims 1-16 and 30-32 were rejected as based upon a defective reissue declaration. This rejection is overcome by virtue of the new reissue declaration discussed above and submitted herewith.

5. Claims 1-16 and 30-32 are rejected under 35 U.S.C. § 251 for alleged improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based.

Although the introductory remarks of the rejection appear to apply to claims 1-16, there is nothing in the body of the rejection that applies to claims 1-16. Additionally, claims 1-16 were not amended during prosecution of the reissue application. Thus, claims 1-16 cannot have recaptured anything, since they are the original claims. Applicants respectfully request that the Office clarify that claims 1-16 are not subject to the rejection.

The Office does provide some explanation as to how the rejection applies to claims 30-32. Once again, the Office is now bringing up an old issue. We note that the issue of recapture

in claims 30-32 has already been addressed, even with an appeal to the Board of Patent Appeals and Interferences (the Board). The matter was resolved to the satisfaction of both the Office and the Board during the reissue examination which resulted in a 79 page Notice of Allowance on December 24, 2004, discussing the very issue, and ultimately finding no recapture.

As noted by the Examiner "claims 30-32 are drawn to separate inventions such that Meyers is on point and claims 30-32 do NOT impermissibly recapture what was previously surrendered." (See reasons for allowance, December 24, 2004, emphasis in original.

As noted in Applicant's prior responses and in the Appeal Brief, claims 30-32 are different inventions. Claim 30 describes a method of generating signals on board a bullet that indicates the general orientation of the bullet relative to a target. (see Applicants' November 6, 2000 Response.) As stated in that response:

Clearly, claim 30 in no way attempts to reclaim subject matter that was surrendered in the prosecution of the '178 patent. The subject matter of claim 30 has nothing whatsoever to do with the steering control means recited in claim 1 of the '178 patent. Indeed, the method recited focuses on a method or process for generating signals on the bullet that indicate the general orientation of the bullet relative to a target. There is nothing whatsoever contained in claim 30 that relate to the steering control means and consequently there is no recapture with respect to the steering control means. Further, the method of claim 30 does not deal with the nature or the characteristics of the weapon that the bullet would be fired from. Indeed as already articulated, the method of claim 30 only deals with a method or process for generating signals on board the bullet that indicates the general orientation of the bullet relative to a target. To the extent that claim 30 is deemed to be broadened, none of the broadening language relates to the subject matter that was surrendered with respect to claim 1 of the '178 patent.

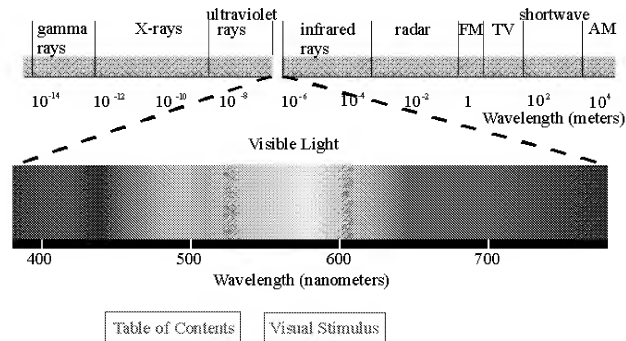
As noted by the examiner, the Meyer court specifically allowed a claim, such as claims 30-32, directed to a new invention (in Meyer it was a subcombination) that had nothing to do with the type of invention where the narrowing had originally occurred. This is precisely that situation. Here, the Office admits "claims 30 and 32 are directed solely to the light-processing aspect of the invention" (see paragraph spanning pages 3 and 4 of the current office action).

Thus, claims 30-32 are directed to a new invention and therefore according to Meyer are not recapturing the subject matter of the original claims, as noted in the original Notice of Allowance. Accordingly, the rejection should be withdrawn.

6, 7, 8. The Office objected to the Specification under 37 C.F.R. § 1.71 as allegedly failing to teach how to make and use the invention commensurate in scope with the claims. Similarly, the Office rejected claims 30-32 under 35 U.S.C. § 112 for essentially the same reason.

The action indicates that “Light would include the entire electromagnetic spectrum.” This statement is simply incorrect. Light is recognized as a small portion of the entire electromagnetic spectrum. Those of skill in the art will readily recognize that “light” refers to the “visible spectrum” which is a relatively tiny subset of the entire electromagnetic spectrum. Those of skill in the art would not refer to RF (radio frequencies), X-rays, gamma-rays or other electromagnetic waves outside the visible spectrum as “light” – the only exception perhaps being the ultraviolet and infrared spectrum, which immediately border the visible spectrum – and sometimes are referred to colloquially as ultraviolet light and infrared light, respectively.

Below is a depiction of the electromagnetic spectrum, showing visible light (as well as UV and IR spectrum) as a relatively small portion.



<http://www.yorku.ca/eye/spectrum.gif>

Applicant respectfully asserts that those of skill in the art will readily recognize what is meant by "light" and that the claimed invention is enabled by the specification as written. Withdrawal of the rejection is respectfully requested.

9, 10. 35 U.S.C. § 102 rejections

Claims 30-32 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Underwood '254. Applicant respectfully disagrees.

Specifically, the Office indicates in claim 30, the claimed method step

'each light [detector] generating an electrical signal that is a function of the intensity of the reflected light sensed by [that] light detector,' this is met by the generating of an electrical signal by the four quadrant PIN diode 12 in Figure 1 of Underwood ('254)

(Bracketed material indicates corrections to reflect the actual claim language.)

The Office continues apparently attempting to support its positions by indicating that "The electrical signal from these quadrants would be in some sense a function of the intensity of the light reflected from target 14 that reaches the four-quadrant PIN diode 14."

Applicants have not found even a single reference to the intensity of the reflected light in the entire Underwood '254 reference. Indeed, column 3, lines 14-17 indicate the signal provided is "proportional to the vertical displacement of the defocused spot from the center of the detector." Thus, in Underwood '254, the position or "vertical displacement" of the reflected light is compared to a known centerpoint. There is no indication that the signals generated are a function of the intensities of two separate detectors as required by Applicant's claim 30. In Underwood '254, the signal is generated as a function of the displacement of the reflected light from the center, not as a function of light intensities.

Furthermore, as Applicants understand it, Underwood '254 appears to be directed to reducing reliance on signal intensities, since those intensities are subject to error via scintillation and terrain masking. see col. 1, lines 15-35. For example, col. 1, lines 20-22 indicate that scintillation in the "reflected laser energy from a target" can cause variations in pulse amplitude. Such variations would result in variations in perceived intensity, as scintillation, by definition involves sudden changes in brightness as most commonly seen in the twinkling of stars. Thus, as we understand it, the reference actually teaches away from generating signals based on reflected light intensities, and thus does not and cannot teach or suggest Applicant's claimed

methods, which, as noted by the Office, require "each light detector generat[es] an electrical signal that is a function of the intensity of the reflected light sensed by that light detector."

For these reasons alone, the rejection under 35 U.S.C. § 102 cannot stand. Applicant respectfully requests withdrawal of the rejection.

Dependent claim 31 depends directly from independent claim 30. Applicants respectfully assert that the claim is patentable for at least the same reasons as claim 30, described above. Withdrawal of the rejection is respectfully requested.

Independent claim 32 stands rejected under 35 U.S.C. § 102 over Underwood '254. The Office indicates only that the "remarks with respect to independent, apparatus claim 32 are substantially those given above with respect to corresponding independent, method claim 30." As such, Applicant respectfully assert that the comments above in relation to the rejection of claim 30 also apply, and at least for those same reasons, the rejection of independent claim 32 should also be withdrawn.

Applicant respectfully asserts that all pending claims are in condition for allowance and respectfully request an indication of the same.

The Commissioner is hereby authorized to charge any fee or underpayment thereof or credit any overpayment to deposit account no. 50-0436

The examiner is requested to contact the undersigned attorney if an interview, telephonic or personal, would facilitate allowance of the claims.

Respectfully submitted,
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